



No.	<b>CF-2009-18</b>	1/1
Issue Date <b>27 April 2009</b>		

# AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 593**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

**Number:** CF-2009-18

**Subject:** Air Driven Generator (ADG) Power Feeder Harness - Wire Chafing

**Effective:** 19 May 2009

**Applicability:** Bombardier Inc. Models:  
CL-600-1A11 (600) - Serial Numbers 1004 through 1085  
CL-600-2A12 (601 Variant) - Serial Numbers 3001 through 3066  
CL-600-2B16 (601-3A Variant) - Serial Numbers 5001 through 5131

**Compliance:** Within 26 months after the effective date of this directive, unless already accomplished.

**Background:** Two cases have been reported in which the ADG has failed to power the essential bus following in-flight deployment as part of its periodic operational check. Subsequent inspection revealed that the ADG power feeder harness wire (Kapton) had chafed on the backshell of its own connector (P1XC), resulting in a short circuit, wire damage and disconnection of the wire from the ADG. Coupled with a dual generator failure, such a disconnection would result in the loss of emergency power to critical systems, with a consequent adverse effect on the controllability of the aircraft.

This directive mandates an inspection to determine the type of wire in the installed ADG power feeder harness. If the wires are a Kapton type, the ADG power feeder harness is to be replaced with one incorporating non-Kapton type wire.

**Corrective Actions:**      **Part I: ADG Power Feeder Harness - Inspection**

Inspect the ADG power feeder harness for wire type, in accordance with the Accomplishment Instructions in Part A of Bombardier Service Bulletin (SB) 600-0737 or 601-0591 (as applicable), both dated 23 July 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

- A. If the wire type is Kapton, proceed to Part II of this directive.
- B. If the wire type is not Kapton, complete the instruction in Part A of the applicable SB. Compliance with this directive is then complete.

**Part II: ADG Power Feeder Harness - Replacement**

Replace the ADG power feeder harness in accordance with the Accomplishment Instructions in Part B of Bombardier SB 600-0737 or 601-0591 (as applicable), both dated 23 July 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

**Authorization:** For Minister of Transport, Infrastructure and Communities

Derek Ferguson  
Acting Chief, Continuing Airworthiness

**Contact:** Mr. Richard Topham, Continuing Airworthiness, Ottawa, telephone 613-952-4428, facsimile 613-996-9178 or e-mail richard.topham@tc.gc.ca or any Transport Canada Centre.